**To:** Clark, Adam[Clark.Adam@epa.gov]; Risley, David[Risley.David@epa.gov]; McKinley, Gobeail[McKinley.Gobeail@epa.gov]; Timin, Brian[Timin.Brian@epa.gov]; Possiel, Norm[Possiel.Norm@epa.gov]; Hogan, Stephanie[Hogan.Stephanie@epa.gov]; Skinner-Thompson, Jonathan[Skinner-Thompson.Jonathan@epa.gov]; Tonnesen, Gail[Tonnesen.Gail@epa.gov]; Palma, Elizabeth[Palma.Elizabeth@epa.gov]

From: Worstell, Aaron

**Sent:** Wed 5/17/2017 7:42:09 PM

Subject: RE: Jim Bridger

As noted by Adam, the approved Wyoming SIP requires that Jim Bridger Units 1 and 2 meet a limit of 0.07 lb/MMBtu (with SCR) by the end of 2021 and 2022, respectively. However, PacifiCorp's 2017 Integrated Resource Plan (IRP) states that the "preferred portfolio" reflects early retirement of Jim Bridger Unit 1 at the end of 2028, and of Jim Bridger Unit 2 at the end of 2032.

Ex. 5 - Deliberative Process

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Unlike other EGUs in Wyoming (e.g., PacifiCorp Wyodak), EPA did not require SCR for the Jim Bridger units through our RH FIP. We only approved that requirement in Wyoming's SIP. We conducted modeling for our final Wyoming RH action that showed relatively low visibility improvements from the combination of combustion controls with SCR at Jim Bridger, ranging from 0.26 to 0.45 dv per unit. A good bit of this visibility improvement comes from the combustion controls (already installed), rather than the SCR. 

Ex. 5 - Deliberative Process

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PacifiCorp began operating SCR on Unit 3 in November 2015, and on Unit 4 in November 2016. Those dates are taken from EPA's Air Markets Program Data.

Adam also asked about the Dave Johnston units in Wyoming. Dave Johnston Units 1 and 2 were not required to install additional NOx controls under regional haze. Under EPA's FIP, Dave Johnston Unit 3 is required to install SCR by January 2019, or shut down by 2027. Under the approved Wyoming SIP, Dave Johnston Unit 4 is only required to operate combustion controls (previously installed).

Note that some limited cases utilities may choose to convert a coal-fired unit to natural gas firing in lieu of installing SCR. However, I don't think that is in play for any of the units discussed here.

Aaron J. Worstell

**Environmental Engineer** 

U.S. Environmental Protection Agency - Region 8

Air Program - Mail Code 8P-AR

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Denver, CO 80202

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What is wanted is not the will to believe, but the wish to find out, which is the exact opposite. -Bertrand Russell

From: Clark, Adam

Sent: Wednesday, May 17, 2017 12:42 PM

To: Risley, David < Risley. David@epa.gov>; McKinley, Gobeail

<McKinley.Gobeail@epa.gov>; Timin, Brian <Timin.Brian@epa.gov>; Possiel, Norm

<Possiel.Norm@epa.gov>; Hogan, Stephanie <Hogan.Stephanie@epa.gov>; Skinner-

Thompson, Jonathan <Skinner-Thompson.Jonathan@epa.gov>; Tonnesen, Gail

<Tonnesen.Gail@epa.gov>; Worstell, Aaron <Worstell.Aaron@epa.gov>; Palma, Elizabeth

<Palma.Elizabeth@epa.gov>

Subject: Re: Jim Bridger

Thanks David - We're looking into it. I haven't spoken with Wyoming about this. The NOx limits for Units 1 and 2 are federally enforceable at 40 CFR 52.2636(b)(12)(d):

"The owners and operators of PacifiCorp Jim Bridger Units 1, 2, 3 and 4 shall comply with the NO<sub>x</sub> emission limit of 0.07 lb/MMBtu by: December 31, 2022 for Unit 1, December 31, 2021 for Unit 2, December 31, 2015, for Unit 3, and December 31, 2016, for Unit 4."

## Ex. 5 - Deliberative Process

Thanks.

Adam Clark

Air Program

**EPA Region 8** 

303.312.7104

From: Risley, David

**Sent:** Wednesday, May 17, 2017 11:50:22 AM

To: Clark, Adam; McKinley, Gobeail; Timin, Brian; Possiel, Norm; Hogan, Stephanie; Skinner-

Thompson, Jonathan; Tonnesen, Gail

Subject: Jim Bridger

Hey Adam,

In one of your meeting invites, you included information that Jim Bridget 1 & 2 are meant to receive SCR under the WY regional haze SIP. We've been doing some digging into this and the owner/operators seem to be hedging against that. For example, PacifiCorp's 2017 IRP indicates their intent not to install any new SCR on their units (see slide 10, here). Have you talked with Wyoming recently about these plans in relation to the SIP?

Best,

David

----Original Appointment----

From: Clark, Adam

Sent: Thursday, May 11, 2017 4:14 PM

To: Clark, Adam; McKinley, Gobeail; Timin, Brian; Possiel, Norm; Odendahl, Steve; Hogan,

Stephanie; Skinner-Thompson, Jonathan; Risley, David; Tonnesen, Gail; Mays, Rory;

Bohnenkamp, Carol

Cc: Morales, Monica; Logan, Paul

Subject: WY IT Discussion

When: Monday, May 15, 2017 2:00 PM-3:00 PM (UTC-07:00) Mountain Time (US & Canada).

Where:

A report out following Friday's discussion with WY.

Call in: 866-299-3188

Conf. Code: Ex. 6 - Personal Privacy